THE MORTON ARBORETUM

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TREES OF THE MORTON ARBORETUM IX

Quercus acutissima (Carruthers), Sawtooth Oak

Without acorns to reveal its generic identity the Sawtooth Oak could easily pass for a chestnut, so closely do its bristle-tipped leaves resemble Castanea. An additional similarity is also evident in the trees' general contour, which while perhaps more rounded than chestnut shows the same symmetry even as immature specimens. A height of forty-five feet is considered maximum size for the species, and because of wide spreading branches a comparable breadth is attained.

With a wide natural distribution including Korea, Japan, China and parts of the Himalayas its hardiness in colder climates is largely dependent on geographical origin. It was not introduced into cultivation until 1862. The Arboretum specimen illustrated, although planted in its present location along Oakwood Drive in the late twenties, is now around twenty-eight or thirty feet tall. Having been subjected to a variety of climatic extremes since that time it is considered fully acclimated.

Glossy foliage is the Sawtooth Oak's chief attraction and the feature commending it most for ornamental use. The acute tipped, obovate-oblong to oblong leaves are from 3½ to 6 inches long, approximately 2 inches across at the widest point and rounded at the base. The margins are evenly serrate with sharp, forward pointing bristles terminating the 12 to 16 pairs of veins. Upper leaf surfaces are a lustrous dark green, the lower lighter. Petioles range up to 1⅜ inches in length.

The acorns are small and closely set on the smooth branchlets. Long spreading and recurving scales cover the cups which enclose about ⅔ of the nut.

Sawtooth Oak bark is shallowly furrowed into long continuous ridges.

Quercus dentata (Thunb.), Daimyo Oak

Leaves of remarkable proportions place the Daimyo Oak in a class by itself, for no other species hardy in the north has foliage of comparable size and texture.

Introduced in 1830 from its oriental habitat which includes Korea, Japan and the northern and western parts of China, the tree is reputedly the best known Asiatic Oak in cultivation. The truth of the matter is, however, it is actually uncommon in the United States, rarely being encountered outside of botanical collections.

The twenty-five foot representatives in the Arboretum Oak group give little indication of the trees' eventual size, which in its native habitat may reach eighty feet with trunk diameters of more than three. And, although mature specimens are ordinarily expected to present a more pleasing aspect, in this instance old trees tend to lose their rounded symmetry without any suggestion of the picturesque. Younger trees are usually more shapely.

Foliage dimensions attest to the Daimyo Oak's individuality, the leaves frequently attaining a length of more than a foot and a width of 6 or 8 inches. Leathery textured and obovate in shape with blunt or rounded tips and tapered bases, they suggest over-sized Bur Oak leaves without the latter's deep sinuses. There are from 5 to 9 rounded lobes or undulations on each side. Young leaves show downy upper surfaces and felty lower ones, characteristics becoming less evident on mature foliage which is dark green above, light green and soft pubescent below. Short petioles on stout pubescent young shoots support them.

Daimyo Oak acorns occur in clusters, are from ½ to ¾ of an inch long and closely seated on the branchlets. They are almost completely enclosed by cups covered with long, narrow, chestnut brown scales.

The bark is darker than typical of members of the White Oak group and deeply furrowed. It is valued by the Japanese for tanning. They also consider it an important silkworm tree.

E. L. Kammerer

The Daimyo Oak (*Quercus dentata*), largest leaved of the Asiatic species

Sawtooth Oak (*Quercus acutissima*) specimen on Oakwood Drive between Spring and Forest Roads

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